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PART 2

Your attention is invited

**NEWS
OF THE
CONSTRUCTION
DIVISION
OF
ASCE**



JOURNAL OF THE CONSTRUCTION DIVISION
PROCEEDINGS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS



DIVISION ACTIVITIES CONSTRUCTION DIVISION

Proceedings of the American Society of Civil Engineers

NEWS

September, 1959

PHILADELPHIA'S CONSTRUCTION DIVISION HAS GOOD FIRST YEAR

The Construction Division of the Philadelphia Section, organized in 1958, wound up a very fruitful first year during which five technical meetings were held. Papers were presented at two of the meetings, while the others comprised an illustrated talk, a panel discussion and a symposium.

The variety of subjects matched the diversity of meeting types. The two papers covered "Good Masonry Construction" by Wm. Kleinfelder, Jr., of John B. Kelly, Inc. and "Installation and Tightening of High Strength Bolts" by G. P. Bolland of Bethlehem Steel Corp.

Alfred G. Graves of Sika Chemical Corp. led a panel on "Proper Use of Concrete Admixtures" and H. M. Logan, Hughes-Voukred Co., presented an illustrated talk on "Modern Methods of Sheathing and Shoring". Blair Birdsall of John A. Roeblings Sons Corp. and chairman of the national CD's Committee on Contract Documents completed the season's meetings by conducting a symposium on his specialty, "Contract Documents".

A. Brinton Carson, chairman of the local Division, has agreed to prepare an article for a future NEWSLETTER concerning the experiences of the Philadelphia Section in forming a Construction Division. In Mr. Carson's words, his committee sought information on organization and procedures when it began but could find very little.

SAN FRANCISCO CD LIVES IT UP

Baseball and top drawer Chinese cookery occupied the attention of the Construction Division of the San Francisco Section this March.

The spring meeting of the group was held "at a well known Chinese restaurant in the heart of Frisco's Chinatown" where Architect John S. Bolles described the design of the San Francisco Giants' new Candlestick Stadium.

And since hearing would never satisfy a group of construction men, a field trip to the stadium was made the Saturday following the dinner meeting.

Contractor is Charles L. Harney and the word is the ballpark will be ready in case the Giants take the pennant.

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CONSTRUCTION DIVISION SESSIONS AT WASHINGTON CONVENTION

This year's annual convention (Hotel Statler in Washington, D. C. October 19-23) will feature a full quota of Construction Division sessions arranged by VADM William O. Hiltabiddle (CEC-Ret.).

Monday, October 19th

General Membership Luncheon

12:15 PM	- (Speaker arranged by Construction Division)
Presiding Speaker	- Walter L. Couse, Chairman, Construction Division
Subject	- John F. Fleberg, Commissioner, Atomic Energy Commission
	- International Construction of Nuclear Power Plants

Afternoon Session

Presiding	- Lyman D. Wilbur, Member, Construction Division Executive Committee (Co-Sponsor with Power Division)
Theme 2:00 PM	- Construction for Nuclear Power Title: Construction of the Dresden Nuclear Power Station Author: John W. Merryman, Manager of Nuclear Plant Engineering, Bechtel Corporation, San Francisco, California
3:00 PM	Title: Design and Construction for the Containment of Dynamic Loads Author: Professor Gordon P. Fisher and William McGuire, Cornell University
3:45 PM	Title: Nuclear Power Plants Construction in England Author: Dr. John Gaunt

Tuesday, October 20th

Morning Session

Joint Session with Highway Division

Theme	- Financing the Interstate System and Its Effects on Other Systems
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Panel of three or four people as session will start at 9:00 AM and terminate at 10:45 AM

Afternoon Session

Presiding	- Joseph F. Jolley, Member, Construction Division Executive Committee
Theme 2:00 PM	- International Construction - Title: Problems in Managing a World-Wide Construction Program Author: Rear Admiral Eugene J. Peltier, CHC, USN, Chief, Bureau of Yards and Docks
2:45 PM	Title: The Big Dish Author: Capt. Frank C. Tyrell, CEC, USN, Resident Officer in Charge of Construction, Sugar Grove, West Virginia

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3:30 PM	Title: Building for the Polaris Missile Author: Capt. A. D. Hunter, CEC, USN, District Public Works Officer, 11th Naval District, San Diego, California
4:15 PM	Title: Deep Draft Harbor Facilities at Rota, Spain Author: Lieutenant Commander Harold T. Cahill, Jr., CEC, USN (Associate Member ASCE), Assistant Resident Officer in Charge of Construction

Thursday, October 22

Afternoon Session

Presiding	- Walter L. Couse, Chairman, Executive Division, Construction Division and John J. Senesey, Chairman, Program Committee Construction Division
Theme	- Construction Management Problems
2:00 PM	Title: Double Jeopardy in Performance and Payment Bonds Author: Robert A. Moyer, Chas. H. Tompkins Co., Washington, D.C.
2:45 PM	Title: World-Wide Construction Safety Activities Author: Robert G. Jenkins, Chief of Safety, U. S. Corps of Engineers, Washington, D. C.
3:30 PM	Title: Current Competitive Conditions Author: Uncle Tester, John Tester & Son, Inc., Clinton, Maryland
4:15 PM	Title: Recruitment of Young Engineers Author: John E. Healy, II, John E. Healy & Sons, Wilmington, Delaware and Chairman, Education Committee, Associated General Contractors of America

Friday, October 23rd

10:00 AM to 3:00 PM—Field Trip of Washington Metropolitan Area to include sightseeing as well as inspection of available jobs under construction, such as:

1. Chantilly Airport
2. Southwest Washington Redevelopment
3. Government Buildings
 - (a) State Department
 - (b) CIA
 - (c) New House Office Building
4. Highway Bridges

WORD OF EXPLANATION . . .

In the first issue of the CD NEWSLETTER in January, a quarterly publication schedule was announced but obviously not adhered to since here it is September. The CD Executive Committee and your Editor tried, but budgetary

limitations eliminated publication of the planned April and July issues. Nevertheless, while a few battles have been lost, the war appears won. For the 1959-60 year we plan to see three CD Journals mailed, each with a NEWSLETTER, with a fourth mailing set for the latter alone.

So now the problem is to fill the NEWSLETTER with worthwhile material. Contributions from all CD members are cordially invited. The yardstick: Any item of interest to a significant portion of the Construction Division's 9,300 members. Mail material to Howard Jacoby, Newsletter Editor, 3 Brook Path, Plainview, New York.

TECHNICAL SESSIONS AT CLEVELAND

The CD held joint technical program sessions with the Soil Mechanics and Foundation Division and with the Structural Division. A paper from the CD-SM & F session "Principles and Methods of Ground Water Control in Excavations" will appear in the October SM & F Journal. It's by Bill Swiger of Stone & Webster, an authority on the subject. You can get a copy free by asking ASCE headquarters. Other papers are out for review and may be published later.

SUBJECT IN SEARCH OF AN AUTHOR

The CD Publications Committee plans to promote a slight variation on the old saw of "characters in search of a play". Under the leadership of M. D. Morris, the committee is drawing up a list of subjects that it believes should be discussed in Journal Papers. These subjects will concern new construction techniques that have been proved in recent years but on which only fragmentary information has heretofore been published.

The Committee, through this NEWSLETTER and individual correspondence, will seek out qualified experts who can pull together current knowledge in definitive form.

Although the Publications Committee comprises members with a wide range of construction knowledge, suggestions for "subjects in search of an author" will be welcomed by the chairman (c/o Test Lab Corp., 250 West 57 St., New York, N. Y.).

ED WHITE TO GET CONSTRUCTION PRIZE

CD's Construction Prize Committee has nominated Edward E. White as this year's award winner for the paper "Deep Foundations in Soft Chicago Clay," in the November 1958 issue of CIVIL ENGINEERING. The annual Construction Prize was established and endowed by the late A. P. Greensfelder, Hon. M. ASCE for an article appearing in CIVIL ENGINEERING for the twelve month period ending in March. The presentation "should accentuate one or more of the following: (a) Ingenuity, novelty or efficiency of field methods, (b) unit cost-time date, (c) engineering basis for advanced practice, (d) engineering analyses or discussions in which the problems inherent in a given situation are recognized and developed." Mr. White, executive vice president of Spencer, White & Prentis, Inc., New York, will receive the Prize at the annual meeting in Washington in October.

F. W. Stubbs, Jr., of Purdue University in Lafayette, Ind., is chairman of the Prize Committee. Verne O. McClurg and Byron D. Spangler served on the Committee.

The prize is awarded each year for the best paper dealing with the construction phase of a project appearing in Civil Engineering for the period April-March. This year's winning effort was "Deep Foundations in Soft Chicago Clays" published in the November, 1958 issue.

F. W. Stubbs, Jr. of Purdue University in Lafayette, Ind., is chairman of the Prize Committee. Verne O. McClurg and Byron D. Spangler served on the committee.

CD COMMITTEE DOINGS

The Executive Committee of the Construction Division held a couple days of full dress meetings during the Cleveland convention in May. Under the guidance of Chairman Walter L. Couse and Vice Chairman Lyman D. Wilbur, most of the sessions were devoted to the routine, but vital, business of coordinating committee work, budget preparation and resolution of day-to-day problems.

The Construction Industry Conference Program was reviewed and the recommendation made to the Joint ASCE-AGC Cooperative Committee that a task committee including the Construction Division be established to implement a specific program.

The Executive Committee also cleared up the situation wherein large numbers of CD members did not receive the first issue of the NEWSLETTER.

All 16 of the Construction Division committees made reports, highlights of which follow.

Equipment Maintenance

Chairman Edgar J. Garbarini reported the committee's conclusion that widened knowledge is required in the following areas: Preventive maintenance programming; Standardization of equipment; Training of maintenance personnel; Equipment life; Spare parts control; Capacity flexibility; Equipment improvement; Cost systems; and Case studies of maintenance methods.

Specific projects undertaken to date by committee members include: (a) A survey to determine available literature and extent of work accomplished by other organizations in the field of equipment maintenance; (b) Survey of needs of construction industry pertaining to equipment maintenance; and (c) Determination of most fruitful areas for concentrated efforts of committee.

The committee is desirous of CD-member suggestions, which should be sent to R. B. Rothschild, Jr., 274 Brannan St., San Francisco 7, Calif.

Contract Documents

Considerable interest has been expressed in the work of the Contract Documents Committee, with numerous requests to serve recent new members: John J. White, Robert F. Borg, Sander L. Wise. Chairman Blair Birdsall expects "some real news" to develop shortly.

Research

"Help Wanted" in the form of information on research projects applicable to construction, which are under way or planned for early start is requested by Chairman William W. Moore (340 Market St., San Francisco, Calif.)

Suggestions from CD members are also in order on research topics where-in ASCE can properly offer sponsorship or other support.

Job Planning

The Job Planning Committee held its Kick-off meeting during the Los Angeles convention last February and laid out a series of programs to be presented at Construction Division sessions at future conventions.

At New Orleans in March, 1960, the committee anticipates instigating a job planning session based on actual experience with projects such as the newly completed Mississippi River bridge, New Orleans Air Terminal, etc.

A similar session discussing responsibilities of the engineer, owner and contractor in the job planning phase, hinged on dam construction, is contemplated for the Phoenix convention in 1961. Chairman Roy G. Cappel (W. Horace Williams Co., P. O. Box 584, New Orleans 7, La.) welcomes suggestions (and volunteers) for papers at New Orleans.

Construction Standards

The Committee on Construction Standards held its first meeting during the Cleveland convention in May.

Chairman Warren S. Mann reported favorably on a study for the committee to undertake revision of the American Standard Safety Code for Building Construction.

Construction of Nuclear Facilities

Contractual arrangements with the Engineering Societies Library for preparation of a civil engineering bibliography on the design and construction of nuclear facilities have been completed by the Committee on Construction of Nuclear Facilities. Chairman W. C. Siler reports that publication of this bibliography is planned at a future date.

The committee is currently working with the Program Committee in presenting nuclear construction sessions at ASCE conventions. The CD sessions planned for the Washington convention are a partial result of this effort.

Insurance and Bonding

Edward R. Higgins, chairman of the Committee on Insurance and Bonding, reports continued progress on an insurance check list that will include brief descriptions of all salient insurance coverages pertaining to the construction industry.

BIDDING PROCEDURES BOOKLET

"A Recommended Guide of Bidding Procedure on Engineering Construction" has been prepared jointly by ASCE and the Associated General Contractors of America, Inc. and is available free by writing ASCE (order code number 1959-20).

The handsome 12 page booklet sets forth recommendations (aimed at engineers preparing construction contracts, plans and specifications for bidding) covering the following areas: Preliminary investigation; plans; specifications; bidding; separate contracts; and subcontracts.

The publication is designed for use in heavy construction work, and is not applicable to building construction projects.

ALUMINUM CONSTRUCTION MANUAL

The Aluminum Construction Manual, just off the press, provides in a single volume data essential to designers and others concerned with stressed aluminum structures. Published by the Aluminum Association, an industry-wide organization, the book presents for the first time computations of allowable loads for beams and columns of aluminum alloy 6061-T6, one of the most widely used aluminum structural alloys.

Fundamentally a reference work, the first part relates to available aluminum structural shapes, giving their dimensions, weights, and properties. Included also are the standard tolerances and miscellaneous data necessary for designing and estimating. This is followed by detailing practice and data on riveted and bolted connections.

A section covers the hitherto unavailable material for beams and columns produced in alloy 6061-T6. The data for various types of laterally supported beams and concentric loads on columns were computed by the Polytechnic Institute of Brooklyn. The work was supervised by R. B. B. Moorman, head of the Institute's Civil Engineering Department.

Data are given on nine alloys that fulfill most structural needs. Found here are the specifications for structures of two commonly used alloys (6061-T6 and 2014-T6) as issued by ASCE.

Making dependable data needed for design readily available is expected to increase use of the light-weight metal. The book is available at cost of printing—\$3.00 per copy—from the Aluminum Association, 420 Lexington Ave., New York 17, N. Y.

1. *Streptomyces* *luteus* (Berk.) *Waksman*

